

Amendments to the Claims:

This listing of claims replaces all prior versions, and listings, of claims in this application.

Listing of Claims:

1. (Currently amended) A system for converting a an input file from a start ~~one~~ data state to a final data state ~~another~~, comprising:

~~a plurality of~~ one or more conversion nodes, each node having executing thereon at least one conversion engine ~~executing thereon~~ for converting a file from a first having ~~a one~~ data state ~~type~~ to a file having another second data state, each conversion engine having an associated cost for performing a conversion of a file from the first data state to the second data state;

a least cost conversion processor to determine a cost associated with each of a plurality of conversion options for converting the file from the start data state to the final data state using one or more of the conversion engines, each conversion option capable of converting the input file from the start data state to the final data state, and to determine a conversion cost associated with each determined conversion option using the costs associated with the conversion engines, said least cost conversion processor determining and to determine a least cost conversion option from the determined plurality of conversion options; and

means for transmitting the input file to one or more of the plurality of conversion nodes ~~computing platforms~~ in accordance with the determined least cost conversion option.

2. (Original) The system recited in claim 1, wherein said plurality of conversion options includes at least one option having at least one intermediate conversion.
3. (Currently amended) The system recited in claim 1, wherein said least cost conversion processor calculates a routing cost associated with transmitting the input file or an intermediate file derived from the input file to one or more conversion nodes for each of said plurality of conversion options, and uses the calculated routing cost associated with transmitting the file in determining which one or more of the plurality of conversion options to use to convert the file from the start data state to the final data state.
4. (Original) The system recited in claim 1, further comprising a cost table having stored therein an estimate of static costs and dynamic costs associated with a particular conversion.
5. (Currently amended) The system recited in claim 4, wherein the static costs include at least one of cycles required by a CPU to ~~perform a execute~~ convert a file of a particular size using a particular conversion engine against a file of a particular size, and the bandwidth required to transmit a particular file.
6. (Original) The system recited in claim 4, wherein the dynamic costs include at least one of current CPU load, memory usage and file I/O.
7. (Currently amended) A method for converting a an input file from ~~one~~ a start data state to a final data state ~~another~~, comprising ~~the steps of:~~

executing at least one conversion engine having a cost for converting a file ~~having~~
~~a one~~ from a first data state to a ~~file having another~~ second data state;

determining a conversion cost associated with each of a plurality of conversion options, each conversion option capable of converting the input file from the start data state to the final data state;

examining the determined conversion costs to identify a least cost conversion option;

determining a conversion path associated with the identified least cost conversion option; ~~according to the least cost from the determined costs;~~ and

transmitting the file according to the determined conversion path. ~~to one of the plurality of conversion nodes in accordance with the least cost.~~

8. (Currently amended) The method recited in claim 7, further comprising ~~the step of~~ determining at least one conversion option having an intermediate conversion.

9. (Currently amended) The method recited in claim 7, further comprising: ~~the step of~~

calculating a cost associated with transmitting the input file for in accordance with each of said plurality of conversion options in addition to the determined conversion costs; and

using ~~uses~~ the calculated cost associated with transmitting the file in determining the least cost conversion.

10. (Currently amended) The method recited in claim 7, further comprising ~~the step of~~ creating a cost table having stored therein an estimate of static costs and dynamic costs associated with a particular conversion option.

11. (Currently amended) The method recited in claim 10, further comprising ~~the step of~~ determining at least one ~~or~~ of cycles required by a CPU to convert a file of a particular size using ~~perform a execute~~ a particular conversion engine against a file of a particular size; and the bandwidth required to transmit a particular file.

12. (Currently amended) The method recited in claim 10, further comprising ~~the steps of~~ determining at least one of number of CPU cycles used, memory usage and file I/O.

13. (Currently amended) A system for sending a file in a first data state from a sending message communicating device to a receiving message communicating device that receives the file in a second data state, comprising:

a first process to determine the first and second data states;

a least cost conversion processor to determine one or more conversion options ~~for~~ capable of converting the file from the ~~first~~ first data state to the second data state ~~using~~ in accordance with the determined first and second data states, said ~~leas~~ least cost conversion processor, comprising:

a second process to assign a conversion cost ~~costs~~ to each of the one or more conversion options and select a ~~, said second process selecting the~~ conversion option having the least cost;

a third process to convert the file in accordance with the selected conversion option ~~have the least cost~~; and

a message distribution interface, for transmitting the message to the receiving message communicating device.

14. (Currently amended) The system recited in claim 13, further comprising a cost table having a plurality of entries corresponding to a conversion engines that are available to perform conversions, the entries having dynamic and static cost information for performing a particular conversion.

15. (Currently amended) The system recited in claim 13, wherein the least cost conversion processor includes the cost of delivering the file to the second message communicating device in addition to the conversion costs.

16. (Original) The system recited in claim 14, wherein an additional conversion engine is added to the system by creating a new entry in said cost table.

17. (Original) The system recited in claim 13, wherein said second process normalizes the costs that are assigned to the one or more conversion engines.

18. (Currently amended) A method for sending a file in a first data state from a sending message communicating device to a receiving message communicating device that receives the file in a second data state, comprising ~~the steps of:~~

determining the first and second data states;

determining one or more conversion options each of which is capable of ~~for~~ converting the file from the ~~first~~ first data state to the second data state using the determined first and second data states, ~~said least cost conversion processor~~, comprising:

assigning conversion costs to the determined one or more conversion options; ~~said second process~~

selecting the conversion option having the least cost;

converting the file in accordance with the selected conversion option
~~having the least cost~~; and
transmitting the ~~message~~ converted file to the receiving message
communicating device.

19. (Currently amended) The method recited in claim 18, further comprising ~~the step of~~
creating a cost table having a plurality of entries corresponding to a conversion engines
that are available to perform conversions, the entries having dynamic and static cost
information for performing a particular conversion.

20. (Currently amended) The method recited in claim 18, further comprising ~~the step of~~
calculating ~~the~~ a cost of delivering the file to the second message communicating device.

21. (Currently amended) The ~~system~~ method recited in claim 19, further comprising ~~the~~
~~step of adding an additional engine by creating a new entry in said cost table~~ performing
an intermediate conversion to convert the file from the first data state to the second data
state.

22. (Currently amended) The ~~system~~ method recited in claim ~~18~~ 13, further comprising
~~the step of~~ normalizing the costs that are assigned to the one or more conversion engines.

23. (Currently amended) A least cost conversion processor for converting a file from a
first data state to a converted file having a second data state in a least cost, comprising:

means for obtaining static and dynamic cost data regarding a plurality of
conversion engines that can be used to convert the file from one data state to another data
state;

a cost table containing entries corresponding to the obtained costs for the plurality
of conversion engines;

means for determining a plurality of conversion options that are capable of
converting the file from the first data state to the second data state using one or more of
the plurality of conversion engines;

means for assigning a cost to each conversion option using the costs in the cost
table assigned to the conversion engines;

~~means for determining at least one conversion engine to convert the file from the~~
~~first data state to the second data state;~~

a process to select the least cost conversion option engine from the determined
conversion options engines as a selected conversion option engine; and

means for sending the file in the first data state to the conversion engines used by
the selected conversion option engine.

24. (Original) The least cost conversion processor recited in claim 23, wherein the cost
table further comprises entries relating to static and dynamic costs associated with using a
particular conversion engine.

25. Canceled.

26. (Currently amended) The least cost processor recited in claim 25, wherein the costs
stored in the cost table are each assigned cost is normalized.

27. (Currently amended) The least cost processor recited in claim 23, further comprising
~~an additional entry in said cost table corresponding to an additional conversion engine~~

means for performing an intermediate conversion to convert the file from the first data state to the second data state.

28. (Original) The least cost processor recited in claim 23, wherein the cost assigned includes a cost for delivering the converted file to a recipient.

29. (Original) The least cost processor recited in claim 23, further comprising means for receiving the converted file from the selected conversion engine.